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CENTRAL FAX CENTERCustomer No. 24498
Application No. 10/566,492PATENT
PU030190

JUN 24 2008

Listing and amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for use in a wireless receiver, comprising:
 - (a) processing a first synchronization channel (305) of a received wireless signal to acquire a slot synchronization; and
processing a second synchronization channel to acquire a frame synchronization while still processing the first synchronization channel to provide correlation data associated therewith; and
if the correlation data is less than a predefined value,
halting the processing of the second synchronization channel to acquire the frame synchronization;
if an elapsed time for the processing of the second synchronization channel prior to being halted is less than a predefined time value, starting over with step (a); and
if the elapsed time is greater than the predefined value, estimating a scrambling code group conveyed in the secondary synchronization channel based on data already accumulated. (b) processing a second synchronization channel of the received wireless signal to acquire a frame synchronization in such a way that the first synchronization channel is used for detecting a change in channel conditions (310).
2. (Original) The method of claim 1, wherein the first synchronization channel is a primary synchronization subchannel (PSCH) and the second synchronization channel is a secondary synchronization subchannel (SSCH) of a universal mobile telephone system (UMTS).

Cancel claim 3.

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4. (Currently amended) A method for use in a wireless receiver, the method comprising the steps of:

processing a first synchronization channel of a received wireless signal to acquire a frame synchronization; and

~~during the processing of the first synchronization channel, processing a second synchronization channel for detecting a change in channel conditions.~~

processing a second synchronization channel to provide correlation data associated therewith; and

if the correlation data is less than a predefined value,

halting the processing of the first synchronization channel; and

if an elapsed time for processing the first synchronization channel prior to being halted is greater than a predefined value, estimating a scrambling code group conveyed in the first synchronization channel based on data already accumulated, otherwise, starting the processing of the first synchronization channel anew.

5. (Original) The method of claim 4, wherein the second synchronization channel is a primary synchronization subchannel (PSCH) and the first synchronization channel is a secondary synchronization subchannel (SSCH) of a universal mobile telephone system (UMTS).

Cancel claim 6.

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7. (Currently amended) Wireless equipment comprising:
a front end (105) for receiving a wireless signal and for providing a stream of received samples;

a primary synchronization element (205) operative on the received samples for providing data for use in acquiring a slot synchronization to a primary synchronization signal of the received wireless signal and for further processing the primary synchronization signal subsequent to the slot synchronization to continue to provide the data for providing data representative of a channel condition;

a secondary synchronization element (210) operative on the received samples for acquiring a frame synchronization to a secondary synchronization signal of the received wireless signal; and

a processor (135), responsive to the provided data subsequent to the slot synchronization from further processing of the primary synchronization signal by the primary synchronization element, for halting the secondary synchronization element as a function of the provided data representative of the channel condition.

8. (Currently amended) The wireless equipment of claim 7, wherein, subsequent to the slot synchronization, the primary synchronization element continues to process the primary synchronization signal of the received wireless signal simultaneously with processing of the received wireless signal by the secondary synchronization element.

9. (Currently amended) The wireless equipment of claim 7, wherein the provided data representative of the channel condition is representative of a correlation between a known primary synchronization code and the received primary synchronization signal, and the processor halts the secondary synchronization element if the correlation is less than a predefined value.

10. (Currently amended) The wireless equipment of claim 7, wherein, once halted, the secondary synchronization element provides an estimate for a scrambling

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code group to the processor if an elapsed time for acquiring the frame synchronization prior to being halted is greater than a predefined value.

11. (Currently amended) The wireless equipment of claim 7, wherein, once halted, the processor restarts the secondary synchronization processor if an elapsed time for acquiring the frame synchronization prior to being halted is less than a predefined value.